

What is Carrier Class Hosted VoIP and what are the Benefits?

Introduction

There are many versions of Voice over IP (VoIP) that can be distinguished as follows:

a) Basic Solutions –

These include the ‘DIY’ version that allows you to create your own phone system over the Internet and your local computer network, e.g. Asterisk, to the free service offered by Skype.

b) Business Grade Systems

These include the business grade systems from traditional manufacturers such as Avaya, Mitel, Ericsson, Nortel and now Cisco which use VoIP technology across the internal business network but use normal BT ISDN services to connect to the Public Switched Telephone Network (PSTN). These systems are designed for heavy duty, highly functional, corporate applications and most of all, they are reliable. This sets the standard for all other VoIP solutions but because the main carrier traffic is across the traditional PSTN network it sets a barrier in terms of costs and flexibility enjoyed by the newer technology platforms.

c) Hosted IP Telephony (HIPT)

This is a relatively new entrant into the VoIP solution stack. Essentially it is a business grade telephony system that sits in a data centre and delivers telephony services to end points (IP phones) across the Internet. Its flexibility and ease of use match the aspirations of the Basic VoIP Solution Providers but it equally satisfies the service level expectations of the most demanding corporate users.

Traditional Bench Mark

The PSTN is now well known for its reliability – the ‘five nines’ service level availability which means 99.999% up time is taken for granted. People are used to the service working and expect the same level of service as if speaking to another person in the same room. When this stops working, all hell breaks loose; directors worry about lost business and think that their world is about to collapse, not without reason. If your customers can’t call you to place an order, the chances are that they will call your competitor – loyalty tends to walk hand in hand with reliability!

The VoIP Interloper

The benefits of VoIP are well documented:

- i) single networks
- ii) reduced call charges out to the PSTN
- iii) flexible call routing
- iv) follow me handsets
- v) “Self Help” Conference and Video Call Centre Seminars without the introduction of expensive Third Party Call Centres
- vi) Free ‘on net’ calls
- vii) Total lower Cost of ownership
- viii) Minimal Capital Outlay
- ix) Minimal setup and relocation costs when staff move between desks, departments or even branches.

Popular Misconceptions

The less well understood part is how the three different solutions are delivered and fit together and what the *relevant* benefits are to individual users or businesses.

In our opinion:

The mass market attraction of **Free / Open Source** solutions has helped to evangelise the more enterprising domestic users and small businesses from the stranglehold of traditional PSTN carriers. However, the free versions of VoIP software tend to have patchy quality and are certainly a long way from the five nines SLA (Service Level Agreement) expected by the average business user.

The Business Grade VoIP solutions have brought considerable operational cost savings to the largest International Enterprises but the initial capital investment and infrastructure costs are beyond the means of most SMEs.

This now opens the door to the new interest and accelerated take up of **Hosted IP Telephony** (HIPT). By undertaking the up front capital investment and spreading the capital and support costs over hundreds of users organisations, HIPT providers like Rosecom provide a grade of service that matches the PSTN. Depending on the size of the business, Rosecom will offer a choice of high quality broadband, leased lines or MPLS (private network) connections. These connect to a carrier grade switch, the Nortel CS 2000, which is the latest version of the DMS (Digital Multiplex System) exchange used by BT across the UK for many years. As you can imagine this traditional legacy has multiple interconnects with the PSTN and guarantees various fail over mechanisms to ensure that there is NEVER downtime in the core system.

TYPICAL NETWORK TOPOLOGY

